ERRATUM ON "SOME BOUNDS FOR
ALTERNATING MATHIEU TYPE SERIES"

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Abstract. The inequalities (2.17), (2.23), (2.25) and (2.27) in [1] are not valid. Figure 1 in [1] remains correct.

Recently, I found out, that the article [1] contains errors. To be precise, the inequalities (2.17), (2.23), (2.25) and (2.27) in [1] are incorrect. Their proofs contain errors.

It is clear from [2, p. 324] that these problems were known to the first author of [1] as early as March 2009. Instead of publishing an erratum the first author of [1] discussed the problems with a third person, and published the article [2] in this journal, without informing his coauthor about it until August 20th, 2010.

The first author of [1] states in the title and abstract of [2], that in [2] "the obtained inequalities improve certain bounds derived recently in" [1] (see [2, p. 315]). This is misleading, because those bounds in [1] were never valid.

In [2] the first author of [1] states also, that his second article [2] "is essentially not a corrigendum to [1]" (see [2, p. 315]). Again, this statement is not true. It contradicts the remarks on pages 320, 321, 322 and 323 in [2].

With this erratum I disagree with these statements of my coauthor. I herewith distance myself from the entire article [1] except for those results, that I contributed personally to [1], and maintain that the inequalities

$$\widetilde{S}_2^{(2,1)}\left(r;\{n\}_{n=1}^{\infty}\right) \leqslant M(r,2)$$

$$\widetilde{S}_2^{(2,2)}\left(r;\{n\}_{n=1}^{\infty}\right) \leqslant M(r,2)$$

$$\widetilde{S}_2^{(2.5,2.2)}\left(r;\left\{n^{1.5}\right\}_{n=1}^{\infty}\right) \leqslant M(r,2)$$

for $0 < r < 3$, illustrated in Figure 1 [1, p.25], remain correct.

REFERENCES

[1] Z. Tomovski and R. Hilfer, *Some Bounds for Alternating Mathieu Type Series*, Journal of Mathematical Inequalities **2** (2008), 17–26.

[2] T. Pogany and Z. Tomovski, *Bounds Improvement for Alternating Mathieu Type Series*, Journal of Mathematical Inequalities **4** (2010), 315–324.

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